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BARK BEETLE EVALUATION
BIGHORN NATIONAL FOREST

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October 1969

JUL 6 1969

CATALOGING = PREP.

Donn Cahill evaluated various bark beetle problem areas on the Forest during the week of September 29, 1969. The mountain pine beetle, Dendroctonus ponderosae, Hopkins, continues to be a problem in some areas. The Engelmann spruce beetle, Dendroctonus obesus, was endemic. The Douglas-fir beetle, Dendroctonus pseudotsuga, is causing some loss. We do not have a sampling system, for use in the early stages of the beetle's life cycle, that helps to predict beetle population trends. Predictions here are based on experience and the number of newly infested trees as compared with the number of trees infested in 1968.

Greybull District - Shell to Adelaide Lake. Engelmann spruce beetle. The tornado damaged timber between Shell and Adelaide Lake had very little spruce beetle activity. The tornado struck in July 1969 which was after the peak flight of this insect. This area should be reexamined after the 1970 beetle flight. No direct action for beetle control is needed at this time.

Medicine Wheel District - Devils Canyon-Hannans Coulee. The Douglas-fir beetle infestation located in the Devils Canyon and Hannans Coulee area is static in trend. This infestation has been in these areas for several years and has killed several thousand trees. The infestation is on steep slopes and there is evidence of considerable wind damage. The infestation trend is considered static. Additional windthrow could cause this infestation to increase. We do not have a satisfactory method for controlling this insect other than logging and salvage and, therefore, cannot recommend chemical control.

Tensleep District - Meadow Lark Lake. Douglas-fir beetle. The Douglas-fir beetle infestation appears to be in a static or decreasing trend. This infestation may have been created by wind damage and felled trees. The stand appears to be in a susceptible condition for Douglas-fir beetle. This susceptibility can increase with additional wind disturbance. Here again, we can only recommend salvage or possibly pile and burn as a method of control. If some control is considered for this area, please refer to FSM 5281.12, paragraph 5, since work done here could well be the type to be financed from other than I&DC funds.

Medicine Wheel District - Little Bighorn River. Mountain pine beetle. This infestation appears to be static to increasing. The loss at this time is in mature and overmature trees. From an entomological standpoint we should wait for a 1970 biological evaluation before initiating direct control.

The small infestation in the summer home site on the Little Bighorn has a static to slightly increasing trend. This infestation was aggravated by a power line right-of-way and the summer home permittee using green trees for fence and clothesline posts. In one case about half of the new attack trees were found in a fence line. If control is warranted near the summer homes, further damage to green trees should be avoided.

Tongue District - Crystal Spring Draw. Mountain pine beetle. The mountain pine beetle has been a continuous problem in this area and along U. S. Highway 14. The beetle infestation may have been stimulated from damage and environmental changes created by constructing Highway 14. This infestation is expected to continue at a static trend in 1970. A heavy basal area causing stand stagnation along with mature and overmature trees makes this stand susceptible to a continuing mountain pine beetle problem. Direct control here will hold down the rate of timber loss but will not prevent future problems.

Tongue District - Wolf Creek. Mountain pine beetle. Barring unforeseen natural beetle mortality, tree killing will continue at an increasing rate if no control action is taken. This infestation is on lands of mixed ownership. For control to be effective all lands would need to be treated since prompt reinfestation would occur if only a portion of the infestation were treated.

RECOMMENDATIONS

If resource values warrant the cost of control, the following actions can be considered:

1. Cut and burn infested trees before July 30, 1970.
2. Cut and treat with E.D.B. or lindane before July 30, 1970.
3. Remove infested trees.

4. For long-range protection consider putting the stand in better growing condition since direct control only knocks down the present infestation and further infestations can be expected at some future date.

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